NDIA '04 Joint Seabasing Logistics

Presented by

Mr. Jonathan Kaskin

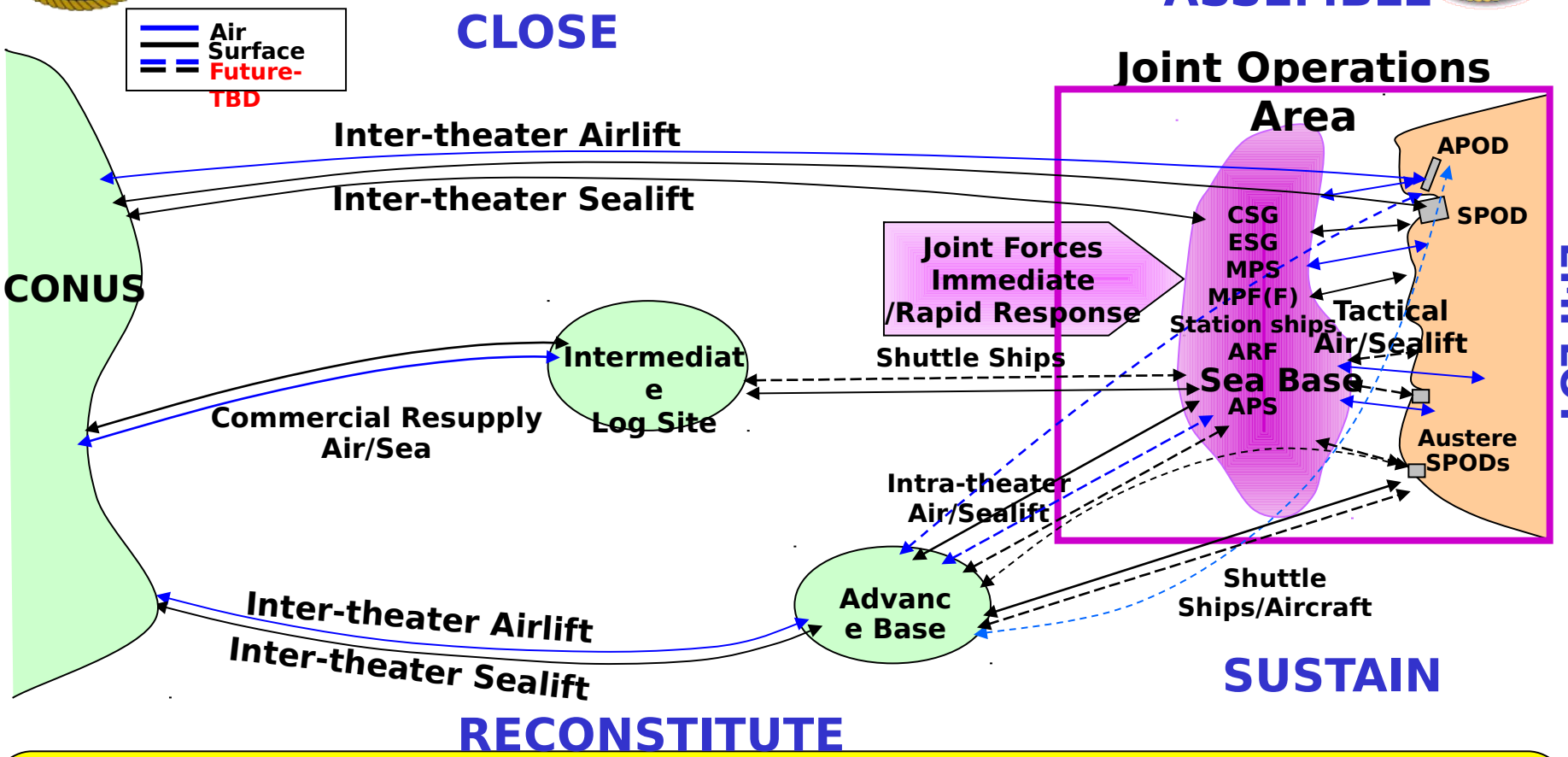
Director, Strategic Mobility and Combat Logistics

October 2004

Briefing Overview

- Sea Base Overview
- Seabasing Logistics Conops
- Developing Concepts
- Key Joint Logistics Issues
- Summary

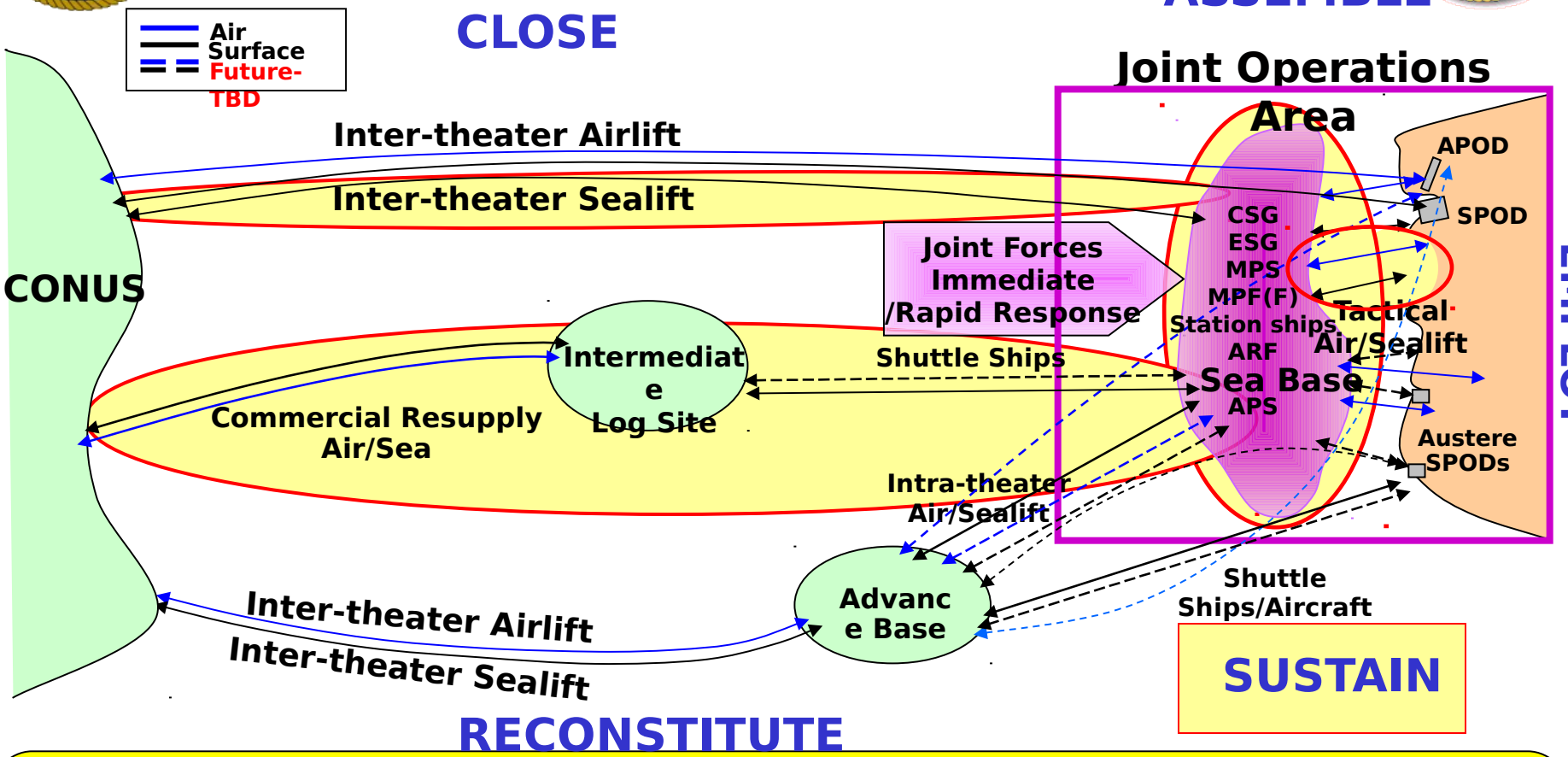
Seabasing Overview



The *sea base* is an inherently maneuverable, scalable aggregation of distributed, networked platforms that enable the global power projection of offensive and defensive forces from the sea, and includes the ability to assemble, equip, project, support, and sustain those forces without reliance on land bases within the Joint Operations Area.

Not to Scale

Seabasing Overview



The *sea base* is an inherently maneuverable, scalable aggregation of distributed, networked platforms that enable the global power projection of offensive and defensive forces from the sea, and includes the ability to assemble, equip, project, support, and sustain those forces without reliance on land bases within the Joint Operations Area.

Not to Scale

Seabasing Components

CSG
Carrier Strike Group

- CVN / CVN 21 (2017)
- Air Wing
- SOF
- DDG
- CG
- T-AOE
- SSN

ESG
Expeditionary Strike Group

- LHD or LHA(R) (2012)
- LPD
- LSD
- MEU(SOC)
- SOF
- DD(X) (2012)
- DDG
- CG
- SSN

MPG
Maritime Prepositioing Group

- MPF(F) (2017)
- MEB
- NSE
- NMCB

OTHER

SAG
Surface Action Group

- CG
- DDG
- LCS (2011)

CLF
Combat Logistics Force

- T-AO
- T-AOE
- T-AKE (2005)
- T-AOE(X) (2013)

"Maneuverable, scalable aggregation of distributed, networked platforms"

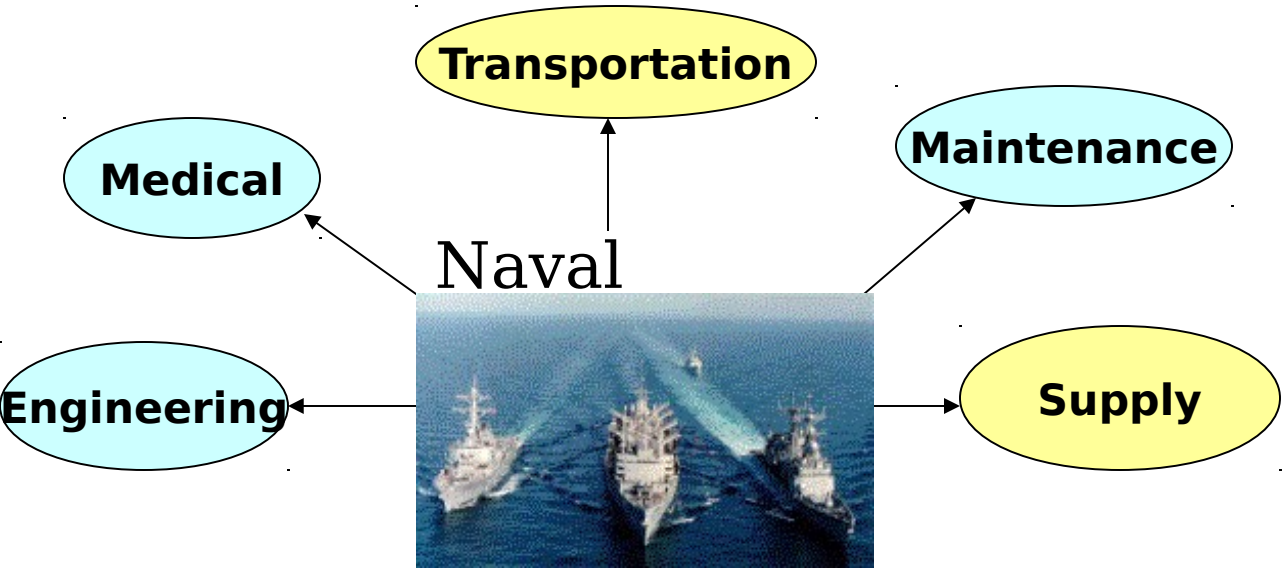
JOINT FORCES

- Other
- SOF
- HSC/TSV (2011)
- Army
- ARF

Future IOC

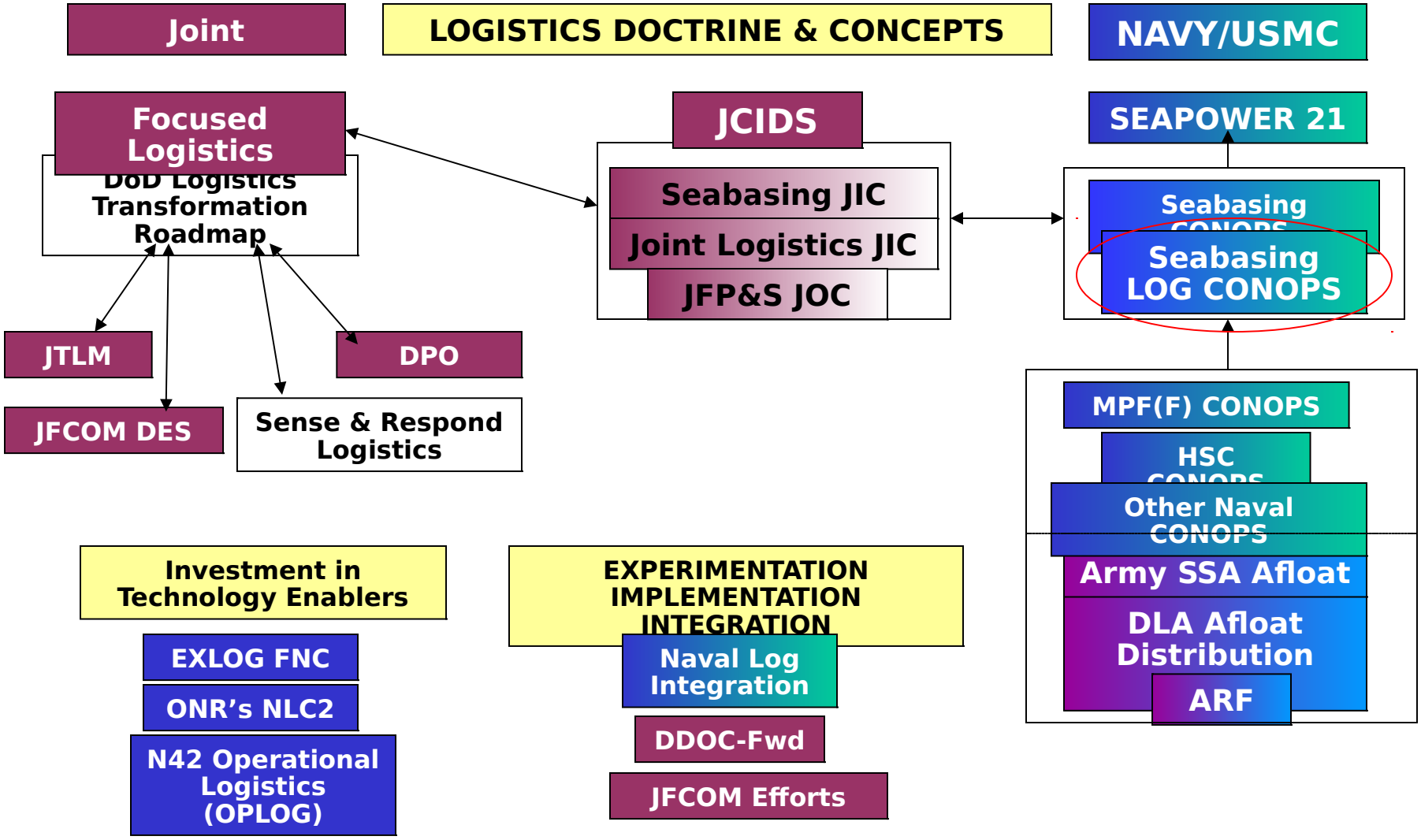
Seabasing Log ConOps
Purpose

To determine the architecture and forces required to provide rapid and persistent ***resupply* to the Sea Base and the forces operating within and from the sea base.**

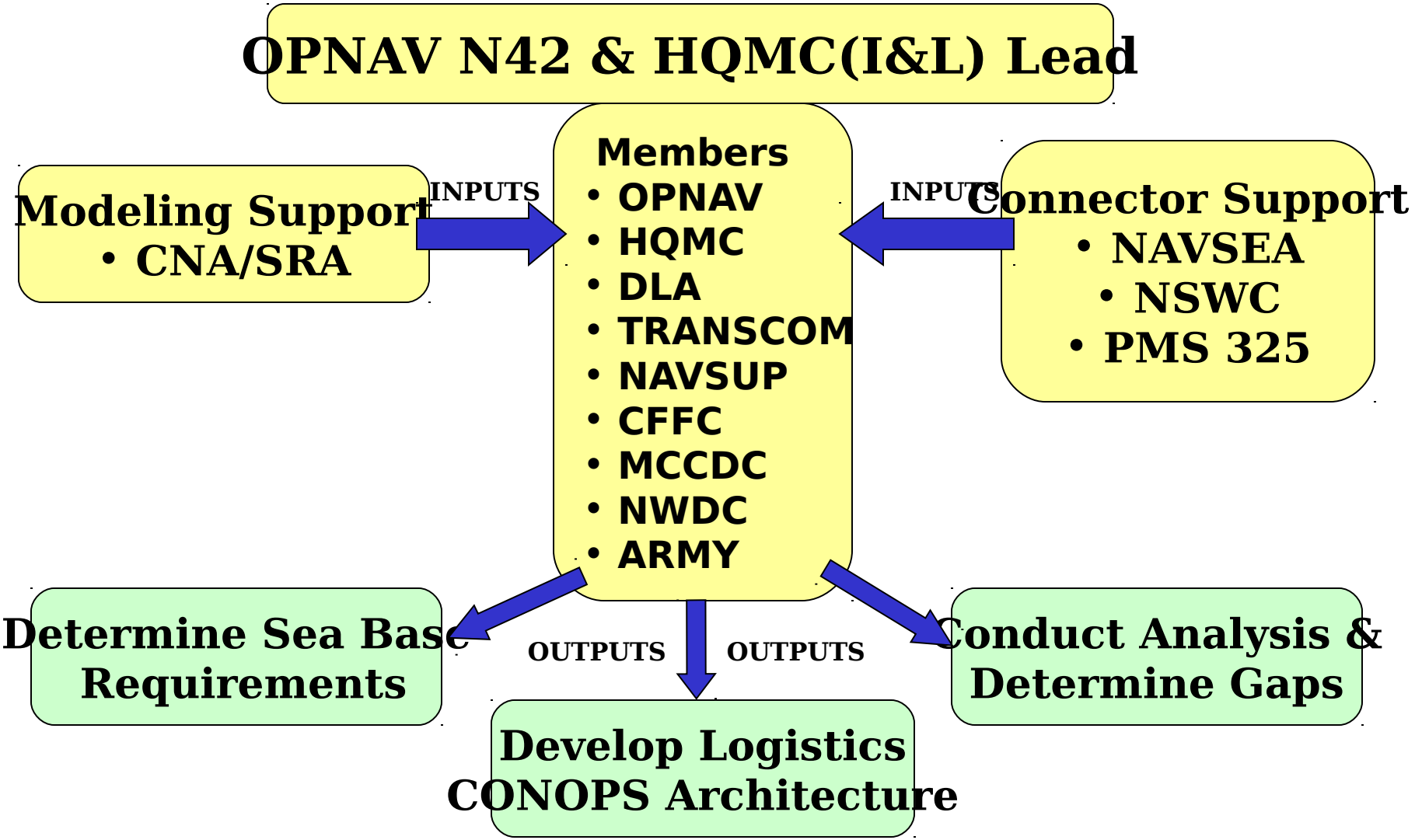


It does not include the deployment or employment of warfighting forces

Logistics Efforts
Some Relationships



Seabasing Log ConOps Working Group



Seabasing Log ConOps

Scope

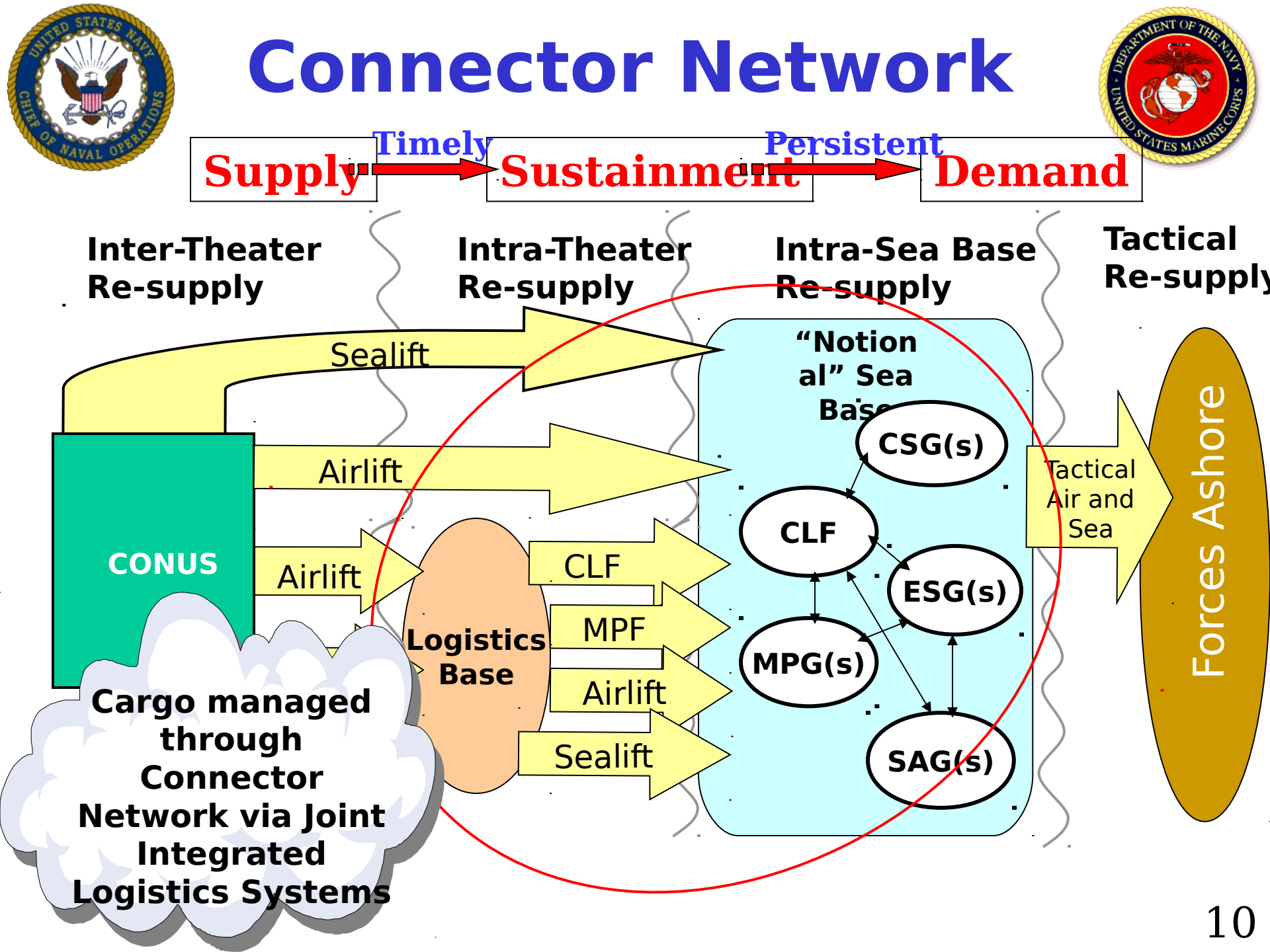
Inter-Theater Re-supply	Intra-Theater Re-supply	Intra-Sea Base Re-supply	Tactical Re-supply

- ✓ **Four Key Areas of Study**
  - ✓ Examine connectors
  - ✓ Examine capabilities
  - ✓ Model the flow of Supplies
    - ✓ Examine Time Critical Requirements (amount & frequency)
    - ✓ Examine Routine Requirements
- ✓ **Examine different Phases**
  - ✓ Surge to War
  - ✓ Wartime Scenario(s) Sustainment

Examine Tradeoffs

Payload vs. Range vs. Speed

Connector Network



Connector Alternatives

Our Focus

Intertheater Re-supply

Surface
- HSS/RSLS
- Commercial Container Ships
- Commercial Tankers
- T-5 Tankers
- ATB

Air
- WALRUS
- Heliplane
- Seaplane

Intratheater Re-supply

Surface
- MPF(F)
- T-AOE-6
- T-AOE(X)
- T-AKE
- T-AO
- T-5 Tankers
- HSC/TSV
- ATB
- RSLS

Air
- C-2
- KC-130J
- WALRUS
- Heliplane
- Seaplane

Intra Sea Base Re-supply

Surface
- MPF(F)
- T-AOE-6
- T-AOE(X)
- T-AKE
- T-AO
- HSC/TSV
- LCAC(X)

Air
- MH-60
- CivMar Puma's
- CH-53E
- CH-53X
- MV-22
- Heliplane

Tactical Re-supply

Surface
- LCAC(X) (2017)
- LCU
- LCH (X) (2018)

Air
- MV-22
- CH-53E
- UH-1Y
- MH-60
- CH-53X

Future IOC

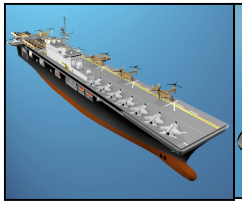
MPF(F) Options

TODAY

2020

Family of Ships

3 SHIPS



3+ SHIPS

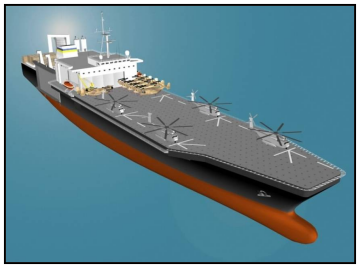
2+ SHIPS

1 SHIP

SOA

Distributed Capability

8+ SHIPS



Required Enabling Capabilities

Interface & Transfer Capabilities

- Skin-to-Skin Transfers
- At-Sea Container Transfer
- Heavy Unrep
- Integrated Landing Platform

Intra-Ship Capabilities

- Modular Packaging Designs
- Selective Offload
- Improved Internal Cargo Handling
- Total Asset Visibility

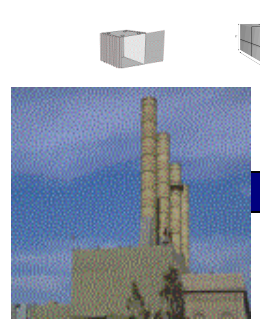
Capabilities required to provide interface between connectors to facilitate the transfer of containers, quadcons, pallets, personnel, ordnance, and equipment.

Without them …

- ***Limited to current methods of resupply***
- ***Unable to meet throughput requirements_***

Common Intermodal Packaging

We need to improve the handling and reduce retrograde, waste, and storage requirements as sustainment moves through the supply chain.



Supplier
Warehourse
Ports

- Container Unstuff
- Transshipment

Sea Base
MPF(F)

Air

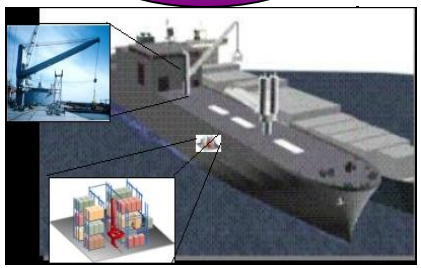
Connector Paths

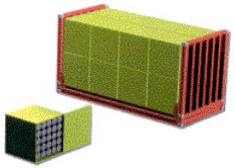
Surface

End User

Ground Forces

Ground Forces





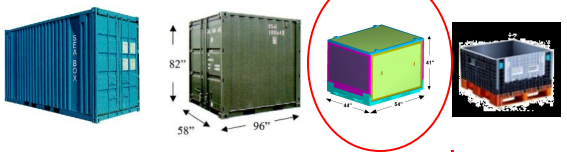
Standardizing the packaging through the transportation system

Packaging Comparison

Large

Small

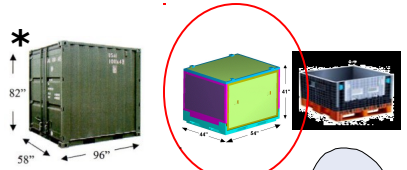
MPF(F)



Resident Transfer Capabilities

Skin-Skin, Heavy Unrep, Vertrep, Air Connect

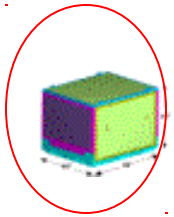
CVN* **Amphib** **CLF***



Heavy Unrep, Vertrep, Air Connect

- **CVN21, T-AKE & T-AOE(X) designs will support**

USN Surface **CLF**



JMIC

54”x44”x41”

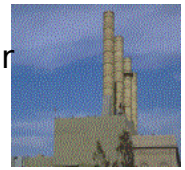
Unrep, Vertrep

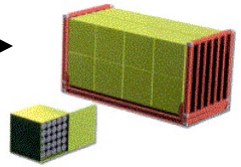
SSN

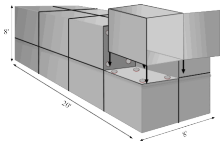
Limited

Standardizing the packaging through the transportation system

Supplier

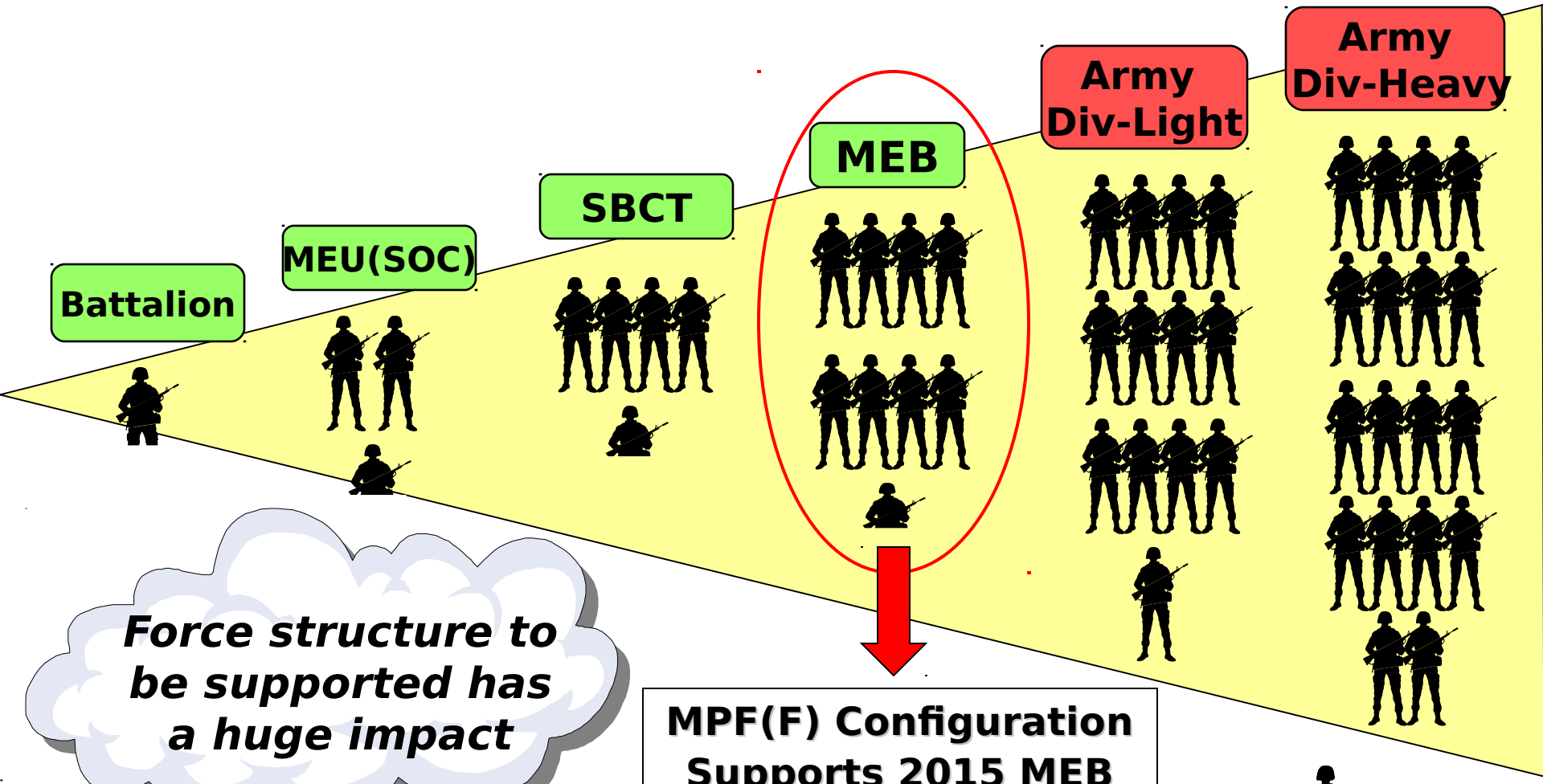






End User

Sizing the MPSRON(F)



Force structure to be supported has a huge impact

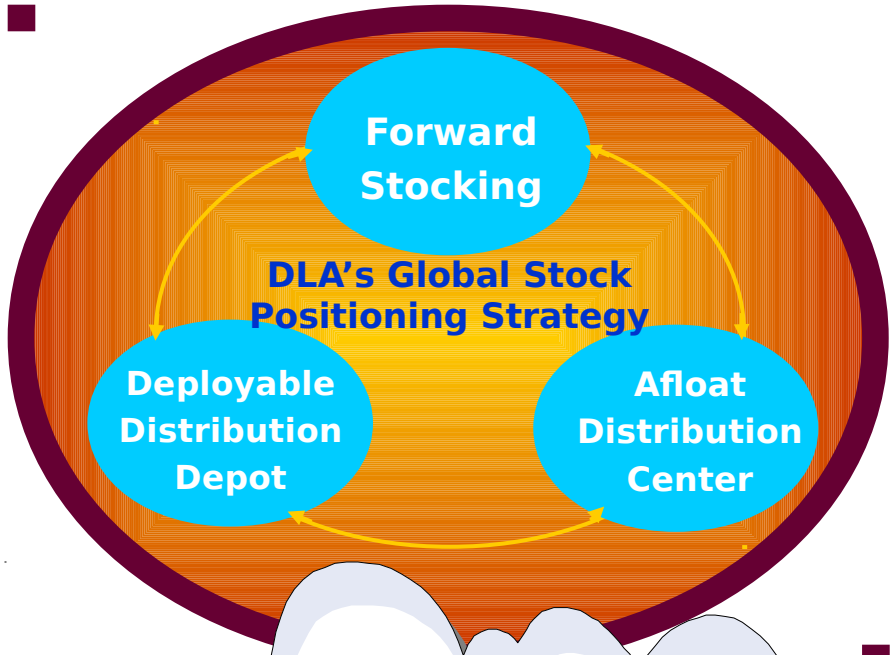
MPF(F) Configuration Supports 2015 MEB Sea Based Echelon

~ 1,000

Developing Concepts

DLA Afloat Distribution Center DADC

- DLA managed
- A forward-positioned, self-contained, mobile capability
- Basic Distribution Functions
  - Receipt, Store, Issue
  - Various Classes of Supply
- Peace and War time operation
- Complements DLA's forward stocking and deployable distribution
- Pierside or At-sea transfer
- Supports seabasing and power projection concepts in both developed and austere operational areas (e.g., ports, ship-to-ship, helo, JLOTS, etc.)

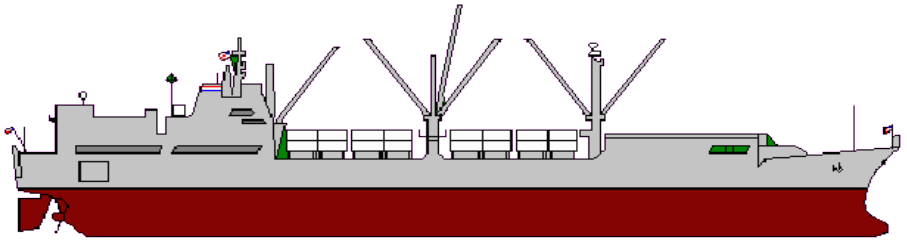


- **What will the ship Carry ?**
- **Type of Ship …T-AKE, T-AFS, Container Ship?**
- **Part of the sea base?**

Developing Concepts

Army's Supply Support Activity SSA Afloat

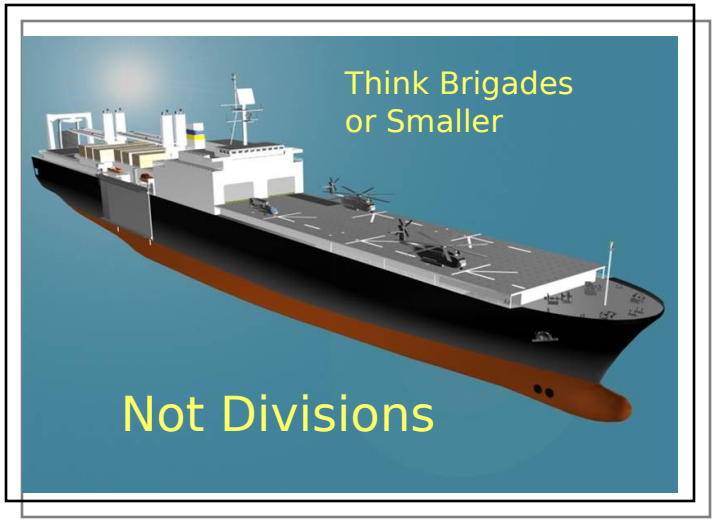
- Immediate supplies
  - early entry forces
- One ship per Army Regional Flotilla
- Support for an Army 1x1 BCT
- Breakbulk not containers
- Potential to operate within the Sea Base



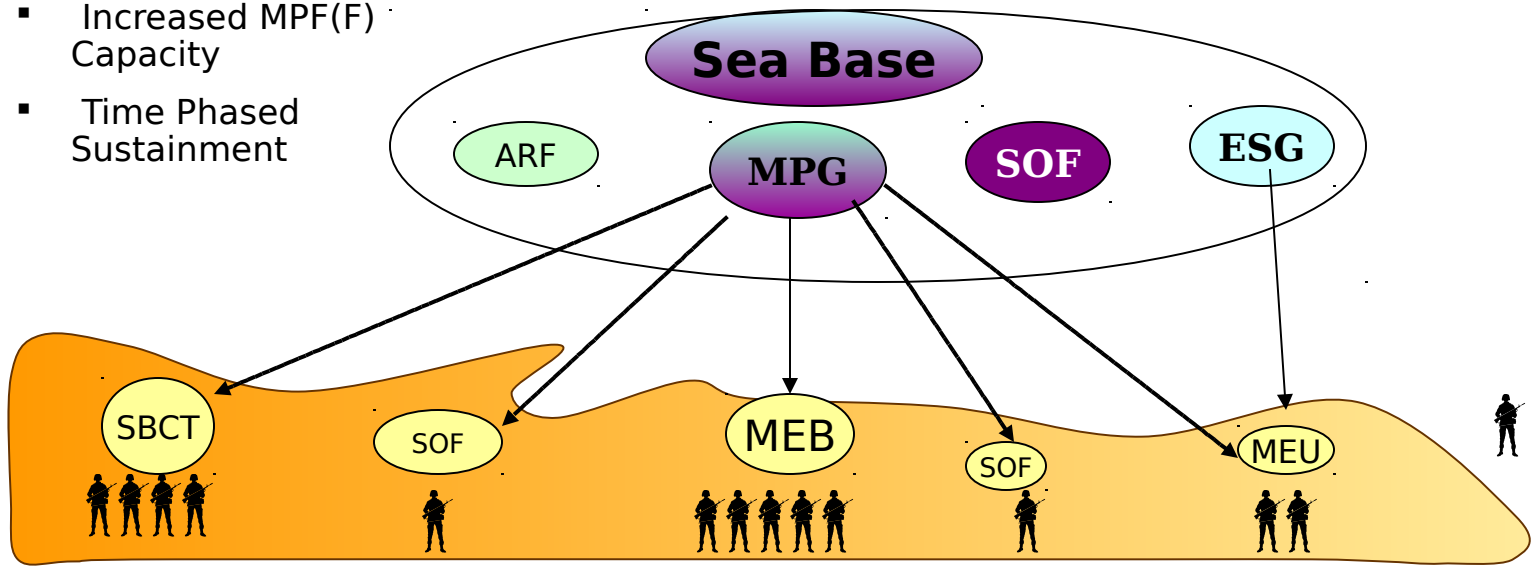
- **Needs more definition**
- **Type of ship? … Could be a T-AFS or T-AKE**
- **How will Army integrate into Sea Base?**

Seabasing & MPF(F)

- <40% of the assets and helo spots used for USMC MEB sustainment
- Potential Excess Capacity to support Joint Sustainment
- Joint Sea Base Solutions
  - Additional Ships
  - Increased MPF(F) Capacity
  - Time Phased Sustainment



JOINT TRANSHIPMENT NODE Throughput To Support Movement of Sustainment



Joint Seabasing Logistics Issues

- What are the Joint Components that operate on or from the sea base?
- What Joint Force ashore is required to be supported from the sea base?
- What is the best utilization of the sea base's sustainment capacity to support the Joint Force?
- What set of connectors are required to sustain the Sea Base?
- What is the maximum sustainable throughput of the Sea Base?
- What is the largest sustainable force? How long can it be sustained?
- How often is resupply required for a particular asset?
- What assets conduct resupply of the Sea Base and resupply of different Sea Base assets?
- Is Resupply done on station or must ships of the Sea Base maneuver before a resupply event?
- What is the maximum distance from an advanced base that a Sea Base can be sustained?

Who needs what?

When?

How often?

Who supplies?

From where?

Metrics

f(x)

- Days of Supply
- Consumption Rates
- Capacities
- Throughput
- Speed / Range
- Capabilities
- Packaging

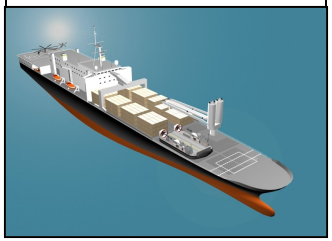
Finding Joint Solutions

- T-AFS
- T-AKE
- Other

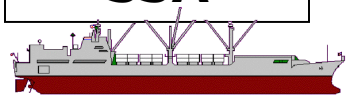
?

DLA's (DADC)

MPF(F)



Army SSA



?

- T-AFS
- T-AKE
- Other

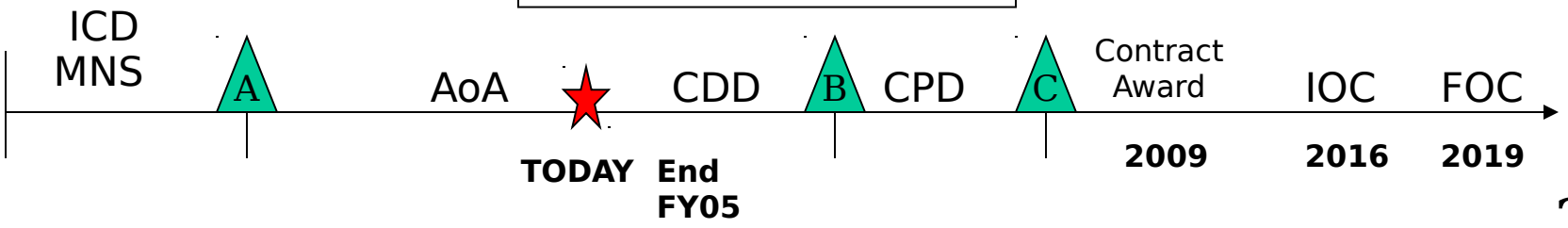
Need For Joint Solutions

- Integrate into a single solution?
- Need more definition of your requirements
- Inputs via JCIDS

JOINT REVIEW AT EACH STEP

FCB → JCB → JROC

MPF(F) TIMELINE



Summary

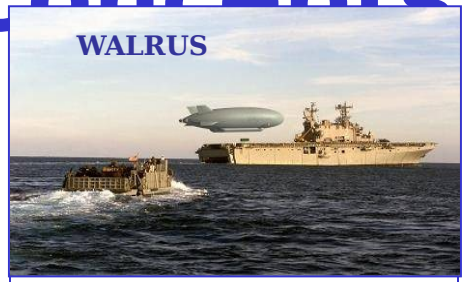
- Sea base planning is well underway, but there remains much to do
- We must finalize requirements soon
- Seabasing is intended as a Joint Warfighting capability
- Our Logistics CONOPS must support future Joint Warfighting requirements
- We should all ensure we are appropriately leveraging Sea base capabilities

POC:
LCDR Frank Futcher
OPNAV N42

Questions?

Future Connector Concepts

Speed - 365 KT
Range – 800 NM
Payload – 22 ST
150 PAX

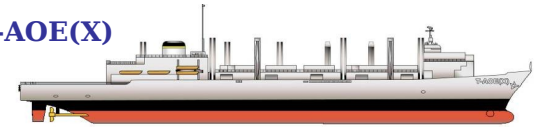


Speed - 76 KT
Range – 5,607-10,000 NM
Avg Payload - 238 ST

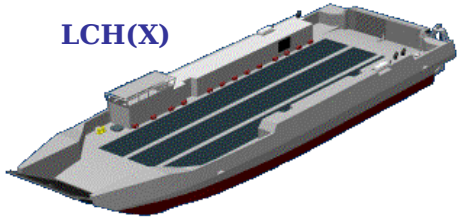
Speed - 38 KT
Range - 6,000 NM
Payload - 8,000 ST
158,000 SQ FT

Speed - 15 KT
Range – 12,000 NM
Payload – 13,000 ST, 750 TEUs
175,000 SQ FT
30-55,000 bbls

Speed – 325 KT
Range – 2000 NM
Payload – 30 tons
180 PAX



Speed 26+ KT
Range – 12,000 NM
Payload – 4,400 ST
160,000 bbls



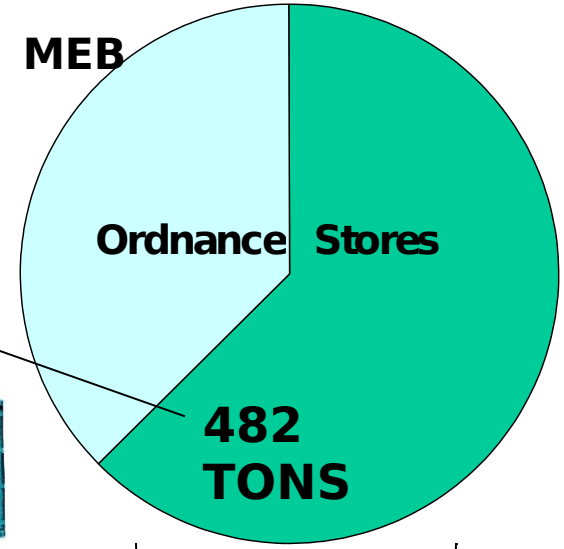
Speed - 30 KT
Range – 200-300 NM
Payload – 2200 ST

Daily Cargo Requirements

"Notional" Sea Base: Assault Phase
26 Ships, 5 Battalions Ashore

CONTAINERS

MPG + MEB

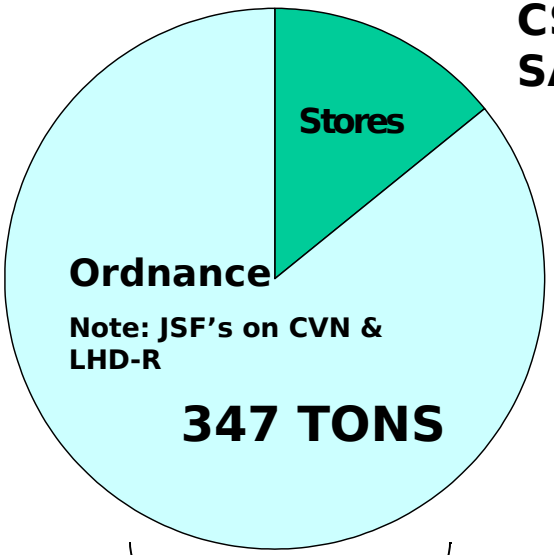


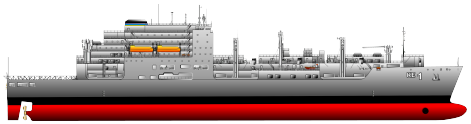
~ 40

1 600 Container Ship ~ 15 days of supply

BREAKBULK

CSG, ESG, SAG, LCS





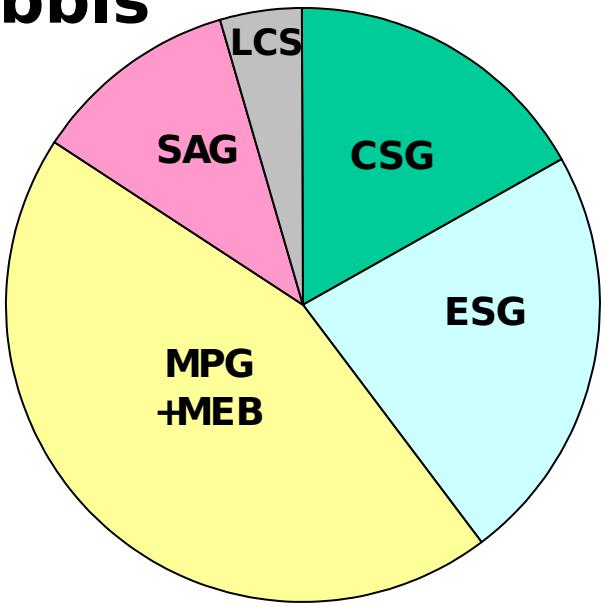
1 T-AKE ~ 14 days of supply

Daily Fuel Requirements

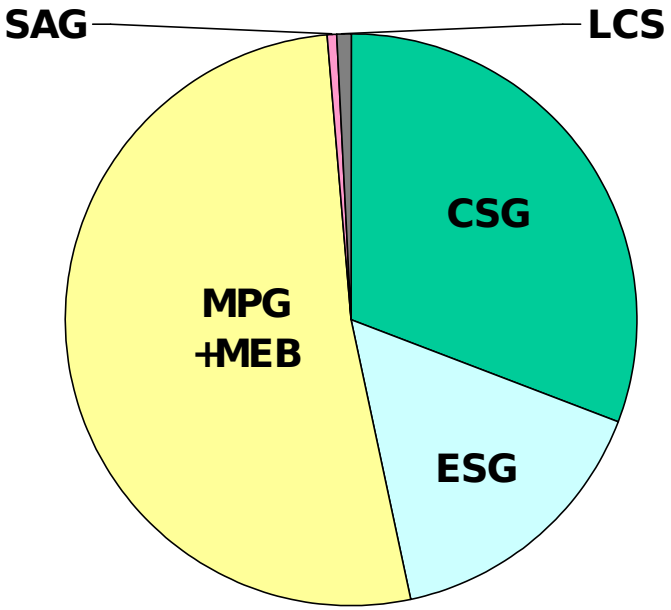
"Notional" Sea Base: Assault Phase

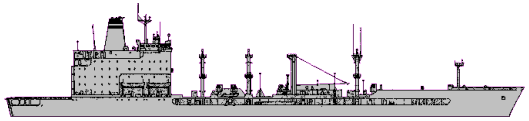
26 Ships; 5 Battalions Ashore

DFM: 19,166 bbls



JP5: 17,523 bbls





1 T-AO ~ 2.5 days of supply